

Lewis Stein, Esq.
NUSBAUM, STEIN, GOLDSTEIN,
BRONSTEIN & KRON, P.A.
20 Commerce Boulevard, Suite E
Succasunna, NJ 07876
nsqbk.office@verizon.net
(973) 584-1400
Attorneys for Plaintiffs

UNITED STATES DISTRICT COURT
for the
DISTRICT OF NEW JERSEY

CHAYA GROSSBAUM and
MENACHEM GROSSBAUM, her
spouse, individually and as
guardians ad litem of the
infant ROSIE GROSSBAUM,

Plaintiffs,

CIVIL ACTION NO.
07-CV-1359 (GEB)

vs.

GENESIS GENETICS INSTITUTE,
LLC, of the State of Michigan,
MARK R. HUGHES, NEW YORK
UNIVERSITY SCHOOL OF MEDICINE
and NEW YORK UNIVERSITY
HOSPITALS CENTER, both
corporations in the State of
NEW YORK, ABC CORPS. 1-10,
JOHN DOES 1-10,

Defendants.

CERTIFICATION OF LEWIS STEIN, ESQ.

1. When finally received on May 8, 2009, the additional records were forwarded to Dr. Cutting. These records contained 56 color pages of graphs produced by the DNA equipment. A true

copy of 5 of these graphs received from Genesis is annexed hereto for the Court's understanding. The letters on the graphs appear to be the four component parts (proteins) of a gene sequence.

2. In addition, we annex hereto a copy of Dr. Cutting's report dated September 29, 2009 which we originally thought we would have in August of 2009 assuming he had the complete chart and all of the deposition testimony he required.

I certify that the foregoing statements made by me are true. I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

Date: December 28, 2009

/s/ Lewis Stein
Signature of Attorney

Lewis Stein, Esq.
Printed name



Model 3100 071804GrossbaumCF1011_A01_10-2_01.ab1
Version 3.7
Basecaller-3100POP4UR10-2
BC 1.5.0.0 Cap 1

Signal G:26 A:30 T:36 C:47
DT3100POP4(BDV3)Y1.mc
3100_1584-029
Points 2000 to 4800 Pk 1



Page 1 of 1
Grossbaum.M/C.CFT10+11
July 18, 2004--5:15 PM
JK-assay - Exon 10 - df508

GGNGAGAGTGGTTTAAAGGAGATGAAAGGGGGAANTNGGANCCTTANAGGGAGGGNANGGNACTNNCNNNGGNGNAGNNAAGAAAGAACAG
10 20 30 40 50 60 70 80 90

GGTTTCNTGGATTATGCCCTGGNC CCNGNAAAGAAATA TCNTCTNTGGTGTTCCTATGANGAANA NGGANA CGGAAGCGTCATCAAAGCA
100 110 120 130 140 150 160 170 180

GGNCAANTGGAAAGAGNGGGNNNNNNNTGTTTNC TGANNNNNGAGNANNTC
190 200 210 220 230

No signal



Model 3100 071804GrossbaumCF1011_B01_10-3_03.ab1
Version 3.7
Basecaller-3100POP4UR10-3
BC 1.5.0.0 Cap 3

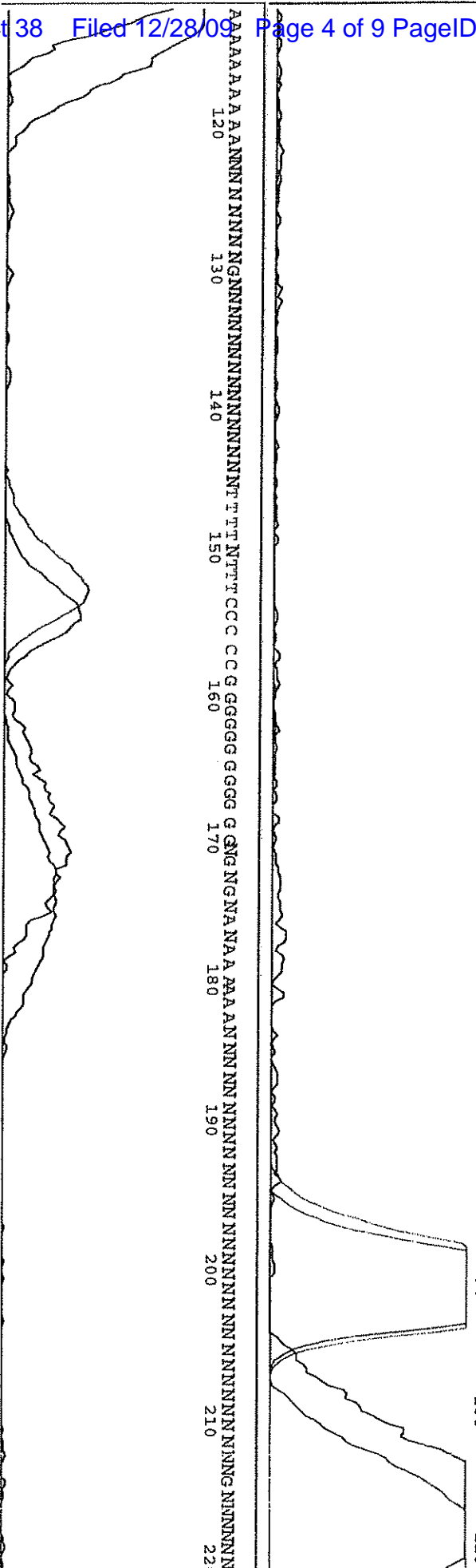


Signal G:42 A:128 T:281 C:250
DT3100POP4(BDV3)v1.mob
3100_1584-029
Points 2000 to 4800 Pk 1 L01



Page 1 of 1
Grossbaum.M/C.CFTR10+11
July 18, 2004::5:15 PM
JK-assay - Exon 10 - dF508

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220



0 230 240 250 260 270 280 290

#3
No Amp / fresh

Model 3100

071804GrossbaumCF1011_C01_10-4_05.ab1

Signal G:36 A:77 T:105 C:121

Page 1 of 1

Version 3.7

Basecaller-3100POP4UR10-4

BC 1.5.0.0

Cap 5

 2643

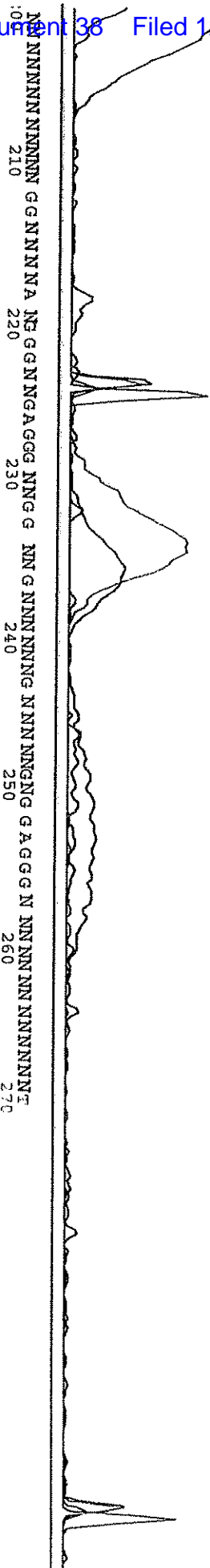
DT3100POP4{BDV3}v1.mcd
3100_1584-029
Points 2000 to 4800 Pk 1

4499 4500 4501 4502 4503 4504 4505 4506 4507 4508 4509 4510 4511 4512 4513 4514 4515 4516 4517 4518 4519 4520 4521 4522 4523 4524 4525 4526 4527 4528 4529 4530 4531 4532 4533 4534 4535 4536 4537 4538 4539 4540 4541 4542 4543 4544 4545 4546 4547 4548 4549 4550 4551 4552 4553 4554 4555 4556 4557 4558 4559 4560 4561 4562 4563 4564 4565 4566 4567 4568 4569 4570 4571 4572 4573 4574 4575 4576 4577 4578 4579 4580 4581 4582 4583 4584 4585 4586 4587 4588 4589 4590 4591 4592 4593 4594 4595 4596 4597 4598 4599 4600 4601 4602 4603 4604 4605 4606 4607 4608 4609 4610 4611 4612 4613 4614 4615 4616 4617 4618 4619 4620 4621 4622 4623 4624 4625 4626 4627 4628 4629 4630 4631 4632 4633 4634 4635 4636 4637 4638 4639 4640 4641 4642 4643 4644 4645 4646 4647 4648 4649 4650 4651 4652 4653 4654 4655 4656 4657 4658 4659 4660 4661 4662 4663 4664 4665 4666 4667 4668 4669 4670 4671 4672 4673 4674 4675 4676 4677 4678 4679 4680 4681 4682 4683 4684 4685 4686 4687 4688 4689 4690 4691 4692 4693 4694 4695 4696 4697 4698 4699 4700 4701 4702 4703 4704 4705 4706 4707 4708 4709 4710 4711 4712 4713 4714 4715 4716 4717 4718 4719 4720 4721 4722 4723 4724 4725 4726 4727 4728 4729 4730 4731 4732 4733 4734 4735 4736 4737 4738 4739 4740 4741 4742 4743 4744 4745 4746 4747 4748 4749 4750 4751 4752 4753 4754 4755 4756 4757 4758 4759 4760 4761 4762 4763 4764 4765 4766 4767 4768 4769 4770 4771 4772 4773 4774 4775 4776 4777 4778 4779 4780 4781 4782 4783 4784 4785 4786 4787 4788 4789 4790 4791 4792 4793 4794 4795 4796 4797 4798 4799 4800 4801 4802 4803 4804 4805 4806 4807 4808 4809 4810 4811 4812 4813 4814 4815 4816 4817 4818 4819 4820 4821 4822 4823 4824 4825 4826 4827 4828 4829 4830 4831 4832 4833 4834 4835 4836 4837 4838 4839 4840 4841 4842 4843 4844 4845 4846 4847 4848 4849 4850 4851 4852 4853 4854 4855 4856 4857 4858 4859 4860 4861 4862 4863 4864 4865 4866 4867 4868 4869 4870 4871 4872 4873 4874 4875 4876 4877 4878 4879 4880 4881 4882 4883 4884 4885 4886 4887 4888 4889 4890 4891 4892 4893 4894 4895 4896 4897 4898 4899 4900 4901 4902 4903 4904 4905 4906 4907 4908 4909 4910 4911 4912 4913 4914 4915 4916 4917 4918 4919 4920 4921 4922 4923 4924 4925 4926 4927 4928 4929 4930 4931 4932 4933 4934 4935 4936 4937 4938 4939 4940 4941 4942 4943 4944 4945 4946 4947 4948 4949 4950 4951 4952 4953 4954 4955 4956 4957 4958 4959 4960 4961 4962 4963 4964 4965 4966 4967 4968 4969 4970 4971 4972 4973 4974 4975 4976 4977 4978 4979 4980 4981 4982 4983 4984 4985 4986 4987 4988 4989 4990 4991 4992 4993 4994 4995 4996 4997 4998 4999 5000

Grossbaum.M/C.CFTR10+11
July 18, 2004:-5:15 PM
JK-assay ~ Exon 10 ~ dF508

10 20 30 40 50 60 70 80 90 100
 KNNNG NGA NN NNNNN NNNG NNNNGNNNNNGG G G NG NNNNG GG G G C N C N NNNNN GGGGG G NGNGGNNNN GNNNTTTT NNNC NNN NGG G GG G GA ANGA ANA

NA.AA.A.A.NNNG.CNNNN.NNNNG.GGNN.GAG.N.G.TT.NNTTT.CCC.CC.NNNNN.NA.N.A.A.A.A.A.A.A.A.A.N.A.N.G.G.N.NNN.NNNNG.N.G.NNN.NNN.NNN.GNNNG.NNAG.N.G.



#4
7/10 KMP



Model 3100 071804GrossbaumCF1011_D01_10-7_07.ab1
Version 3.7
Basecaller-3100POP4UR10-7
BC 1.5.0.0 Cap 7

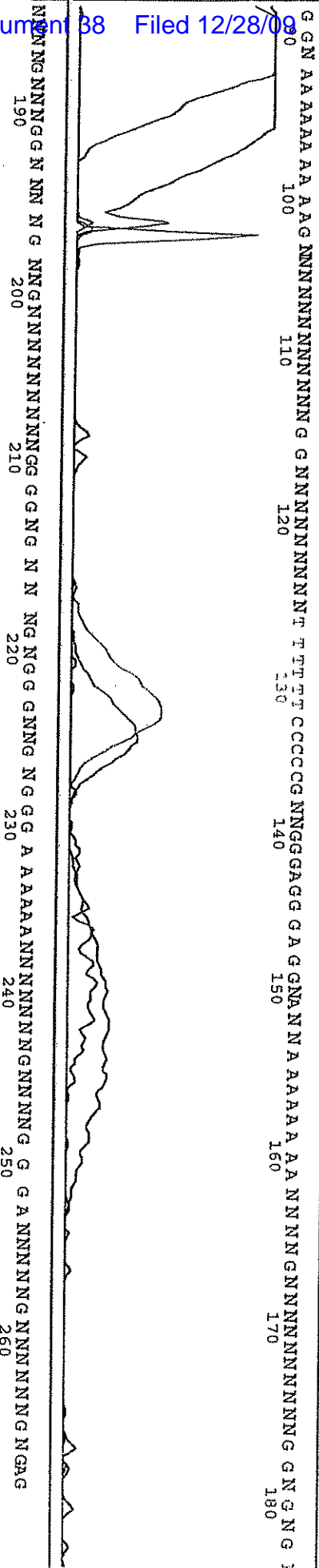


Signal G:36 A:98 T:171 C:186
DT3100POP4(BDv3)v1.m
3100_1584-029
Points 2000 to 4800 PK 1



Page 1 of 1
Grossbaum.M/C.CFTTR10+11
July 18, 2004--5:15 PM
JK-assay - Exon 10 - df508

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260





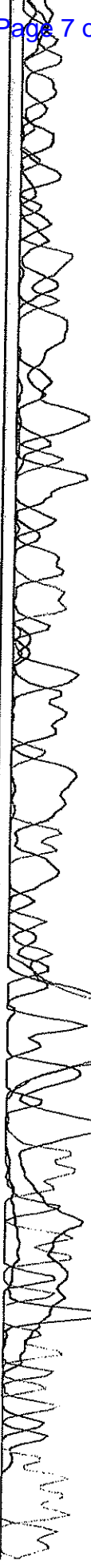
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Version 3.7
Basecaller-3100POP4UR10-8
BC 1.5.0.0 Cap 9

Signal G:141 A:124 T:116 C:101
DT3100POP4(BDV3)vl.mob
3100_1584-029
Points 2068 to 4800 Pk 1 Lc

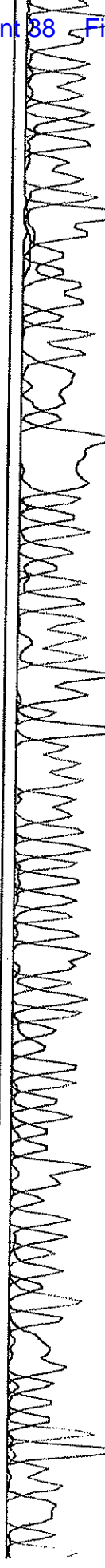


Page 1 of 1
Grossbaum.M/C.CFTR10-11
July 18, 2004::5:15 PM
JK-assay - Exon 10 - dF508

CGCTTC AATGATGATTATGGAGAACTGGAGCCCTTCGAGGGTAAATTAAGCACA CTCCAG AATTTCAT T NNGTCTCCAG TTTTCC



IGATATGCTGGCACCATTAAGAAATATCATCTTGGTGTTCCTATGATGATATAGATACAGAGCGTCATCAAGCATGCCAACT



AGAAAGGTAGGTCNTAGCTGTTTCCCTGANNNNNNNNNNNNN



Readout -> no frameshift

*#8 Exon 10
Normal allele sequence*

JOHNS HOPKINS
UNIVERSITY

Institute of Genetic Medicine

733 N. Broadway
BRB Suite 551/Room 559
Baltimore, MD 21205
PHONE: 410-955-1773/FAX: 410-614-0213
EMAIL: gcutting@jhmi.edu

Garry R. Cutting, MD
Professor, Pediatrics and Medicine
Aetna/U.S. Healthcare Professor of Medical Genetics

September 29, 2009

Mr. Lewis Stein
Nusbaum, Stein, Goldstein, Bronstein & Kron
Counsellors at Law
20 Commerce Boulevard
Succasunna, NJ 07876

RE: Grossbaum vs Genesis Genetics et al

Dear Mr. Stein,

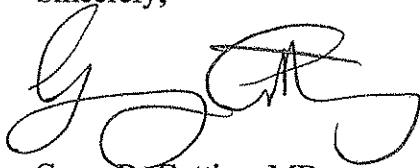
You have asked me to provide an opinion in the above referenced case. I have reviewed records that were provided by Genesis Genetics and New York University School of Medicine, as well as depositions of Dr. Mark Hughes, Dr. Licciardi and Alexis Adler, and publications regarding multiplex marker analysis provided by Dr. Rechitsky. As I understand, the Grossbaums underwent preimplantation genetic diagnosis in which egg retrieval, *in vitro* fertilization, and embryo biopsy performed at NYU IVF Clinic. Genetic diagnosis for cystic fibrosis was performed by Genesis Genetics on samples provided by NYU. The child that was born to the Grossbaums as a result of this procedure was found to be affected with cystic fibrosis.

I have formed the opinion that there are two areas where Genesis Genetics and the NYU IVF Clinic failed to offer a reasonable level of care. The first is in the counseling of the Grossbaums regarding alternatives for embryo transfer after it was discovered that the embryos recommended for transfer by Genesis Genetics were not suitable for transfer. Allele dropout (aka ADO) is a well established source of error in preimplantation genetic diagnosis. From the deposition of Dr. Licciardi, it was apparent that he was not aware of this potential cause for error. Dr. Licciardi indicated during his deposition that he did not understand the results of the genetic testing results transmitted by Genesis Genetics. There is also no documentation of what was said during the counseling session between Dr. Licciardi and the Grossbaums regarding the risks of potential sources of error. Thus, Dr. Licciardi failed to adequately appraise the Grossbaums of the potential risks of using alternative embryos for transfer.

The second area of concern relates to the diagnostics performed by Genesis Genetics. The use of additional markers encompassing a gene such as CFTR has been shown to reduce errors due to allele dropout. Numerous manuscripts had been published and abstracts presented at national and international meetings before the date of the Grossbaums' procedure indicating the value of including genetic markers to minimize errors due to ADO. Genesis Genetics is a high profile provider of PGD services and has by their report, performed many cases of PGD for cystic fibrosis. Thus, it is reasonable to expect that Genesis Genetics would have offered multiplex DNA markers to minimize the risk of error due to ADO in the Grossbaum case. If the laboratory was unable to offer this service, then the Grossbaums should have been informed so that they would have the option to select other services that offered PGD using multiplex markers.

Please contact me should you have any further questions regarding this case.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. R. Cutting', with a stylized, cursive script.

Garry R. Cutting, MD
Professor, Pediatrics and Medicine
Director, Post-Doctoral Training Program
Director, DNA Diagnostic Laboratory